

IN THE SPECIFICATION:

Please delete the paragraph beginning on page 1 and ending on page 3, and replace with the following:

The present invention is related to the following applications entitled "Method and Apparatus for Counting Instruction Execution and Data Accesses", serial no. 10/675,777, attorney docket no. AUS920030477US1, filed on September 30, 2003; "Method and Apparatus for Selectively Counting Instructions and Data Accesses", serial no. 10/674,604, attorney docket no. AUS920030478US1, filed on September 30, 2003; "Method and Apparatus for Generating Interrupts Upon Execution of Marked Instructions and Upon Access to Marked Memory Locations", serial no. 10/675,831, attorney docket no. AUS920030479US1, filed on September 30, 2003; "Method and Apparatus for Counting Data Accesses and Instruction Executions that Exceed a Threshold", serial no. 10/675,778, attorney docket no. AUS920030480US1, filed on September 30, 2003; "Method and Apparatus for Counting Execution of Specific Instructions and Accesses to Specific Data Locations", serial no. 10/675,776, attorney docket no. AUS920030481US1, filed on September 30, 2003; "Method and Apparatus for Debug Support for Individual Instructions and Memory Locations", serial no. 10/675,751, attorney docket no. AUS920030482US1, filed on September 30, 2003; "Method and Apparatus to Autonomically Select Instructions for Selective Counting", serial no. 10/675,721, attorney docket no. AUS920030483US1, filed on September 30, 2003; "Method and Apparatus to Autonomically Count Instruction Execution for Applications", serial no. 10/674,642, attorney docket no. AUS920030484US1, filed on September 30, 2003; "Method and Apparatus to Autonomically Take an Exception on Specified Instructions", serial no. 10/674,606, attorney docket no. AUS920030485US1, filed on September 30, 2003; "Method and Apparatus to Autonomically Profile Applications", serial no. 10/675,783, attorney docket no. AUS920030486US1, filed on September 30, 2003; "Method and Apparatus for Counting Instruction and Memory Location Ranges", serial no. 10/675,872, attorney docket no. AUS920030487US1, filed on September 30, 2003; "Method and Apparatus for Maintaining Performance Monitoring Structures in a Page Table for Use in Monitoring Performance of a Computer Program", serial no. 10/757,250, attorney docket no. AUS920030488US1, filed on January 14, 2004; "Method and Apparatus for Providing Pre and Post Handlers for Recording Events", serial no. 10/757,192, attorney docket no. AUS920030543US1, filed on January 14, 2004; "Method and Apparatus for Determining Computer Program Flows Autonomically Using Hardware Assisted Thread Stack Tracking and Cataloged Symbolic Data", serial no. [[____]] 10/803,663, attorney docket no. AUS920030548US1, filed on

[[____]] March 18, 2004; "Method and Apparatus for Autonomically Moving Cache Entries to Dedicated Storage When False Cache Line Sharing is Detected", serial no. 10/757,227, attorney docket no. AUS920030555US1, filed on January 14, 2004; "Method and Apparatus for Optimizing Code Execution Using Annotated Trace Information Having Performance Indicator and Counter Information", serial no. 10/757,197, attorney docket no. AUS920030556US1, filed on January 14, 2004; "Method and Apparatus for Providing Hardware Assistance for Code Coverage", serial no. [[____]] 10/807,094, attorney docket no. AUS920040059US1, filed on [[____]] March 22, 2004; "Method and Apparatus for Autonomic Test Case Feedback Using Hardware Assistance for Code Coverage", serial no. [[____]] 10/808,716, attorney docket no. AUS920040060US1, filed on [[____]] March 22, 2004; "Method and Apparatus for Providing Hardware Assistance for Data Access Coverage on Dynamically Allocated Data", serial no. [[____]] 10/806,633, attorney docket no. AUS920040062US1, filed on [[____]] March 22, 2004; "Method and Apparatus for Autonomic Test Case Feedback Using Hardware Assistance for Data Coverage", serial no. [[____]] 10/806,917, attorney docket no. AUS920040063US1, filed on [[____]] March 22, 2004; "Method and Apparatus for Hardware Assistance for Prefetching Data", serial no. [[____]] 10/806,871, attorney docket no. AUS920040064US1, filed on [[____]] March 22, 2004; and "Method and Apparatus for Prefetching Data from a Data Structure", serial no. [[____]] 10/806,866, attorney docket no. AUS920040065US1, filed on [[____]] March 22, 2004. All of the above related applications are assigned to the same assignee, and incorporated herein by reference.

Please delete the paragraphs on page 12, lines 1-7, and replace with the following:

accordance with the preferred embodiment of the present invention; [[and]]

Figure 24 is a flowchart of a process for illustrating metadata including an identification of what data is to be prefetched from the starting point in accordance with the preferred embodiment of the present invention[[.]] ; and

Figure 25 is a flowchart of a process for illustrating metadata including an identification of what data is to be prefetched from the starting point in accordance with the preferred embodiment of the present invention.

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